Abstract of the Disclosure

A medical bandaging product for being dispensed in predetermined lengths suitable for a given medical use, and includes an elongate sleeve formed of moisture-impervious material and sealable to prevent entry of moisture and an elongate medical material positioned in the sleeve and sealed therein against entry of moisture until use. The medical material includes a substrate formed of a single thickness layer formed of first yarns. The second yarns are integrated into the single thickness layer of the first yarns. The second yarns are high-strength, high modulus fibers for increasing the strength and dimensionally stabilizing the substrate. A reactive system is impregnated into or coated onto the substrate, the system remaining stable when maintained in substantially moisture-free conditions and hardening upon exposure to sufficient moisture to form a rigid, self supporting structure. A soft, flexible protective wrapping encloses the substrate along its length to provide a cushioning barrier between the substrate and the skin of a patient when the material is in use. A clip or other closure devices is provided for resealing the sleeve against entry of moisture after a predetermined length of the bandaging product has been dispensed for use to prevent hardening of the substrate remaining in the sleeve.